

# EDINBURGH CHAMBERS' JOURNAL

CONDUCTED BY WILLIAM CHAMBERS, AUTHOR OF "THE BOOK OF SCOTLAND," &c., AND BY ROBERT CHAMBERS, AUTHOR OF "TRADITIONS OF EDINBURGH," "PICTURE OF SCOTLAND," &c.

No. 192.

SATURDAY, OCTOBER 3, 1835.

PRICE THREE HALFPENCE.

## EXTEMPORE INVITATIONS.

A LADY, to whom I have the honour to be related in a near degree, favoured me, some time since, with the following letter:—

"Dear —, I have been much surprised, that, amidst all your household sketches, which come home to so many firesides, you have never presented us with one respecting that odious practice, which some gentlemen have, of giving extempore invitations. My husband, as you well know, is of a social and easy disposition; very happy himself (at least so he tells me), and fond of seeing others happy. We are in tolerable circumstances, and have a pleasant house, full of thriving children. Every thing, indeed, goes on smoothly with us, except that he occasionally distresses me by the practice alluded to. He, poor man, as I often tell him, knows little of the toils and troubles of housekeeping: not a single thing has he to do—but furnish the money; and even that is generally brought to me by some one connected with the warehouse. He rises in the morning to a good breakfast; has all his little ones brought to him in clean pinafores to be kissed and prattled with; goes off to business; comes back to dinner, which is invariably ready for him at a certain hour; spends the evening in reading, chatting, or a game at chess: never once does he reflect on the almost ceaseless anxieties, not to speak of positive labours, which I have to undergo, between morning and night, in keeping the wheels of the domestic system in motion. To do him justice, he is not difficult to please, but allows himself, on washing days, and at other times of high domestic concernment and bustle, to be put off with as poor a dinner as any wife could well have the conscience to set before a husband. In that respect I have no fault to find with him. My only complaint is, that, well as he might know by this time the banyan days of the establishment, he has either so little tact, or so slight a regard for my comfort, that *on no day* does he scruple to ask one or more of his friends home with him, to take what he calls their *chance*, though, were he to reflect but for one moment, he might assure himself that this chance, properly interpreted, was a sheer certainty of starvation. For instance, now, on the Mondays, we are just as sure to have a refaccimento or revival of the Sunday dinner, as we are to have a dinner at all. Suppose *that* to have been a boiled jigot, up it comes again, perhaps stewed, possibly hashed, or, if we have been very busy, not improbably cold; and a very fair dinner, say I, for two persons. But a set-out like this, you will readily allow, is not fit to appear before a stranger—insufficient alike in quantity and in quality. Well, what do you think my wise husband will sometimes do, but bring home two—nay, three—I have even known four—of his gentleman friends, to regale themselves on this apparition of all that is scranky! I shall never forget the first surprise of this kind which he gave me. It happened about three months after our marriage, all the previous time having been, as he will gaily tell me, devoted to home and me, though I strongly suspect that he was at that period compelled to see too many friends by regular invitation to have any heart for extempore ones. Only think of what I then was—a young creature, little skilled in housekeeping, but most tremblingly anxious to conduct it in a creditable manner—the first fearful, prideful feelings with which I found myself seated at table of my own, hardly yet worn off; resolved to have every thing neat,\* every thing of the best, as long as I should be there—not being yet aware

of the "gulraivitching" which children occasion in a dwelling; and, above all, solicitous of maintaining, by every part of my own conduct and all domestic appearances, the honour of my husband in the eyes of his friends. What, then, must have been my sensations when, one day—when, as ill luck would have it, I had trusted to a relic of cold lamb—he came in at five with two of his old jolly bachelor friends, regular mutoneers, as you would call them, overflowing with good spirits and hungry as ogres, whom after introducing to me he said he had just seized upon 'Change and dragged home—such were his words—to dinner. "Never mind, my dear, what you give us: we will just take our *chance*, and, if better fare be scant, make all up with the cheese." It was very well for him to say so; but, as for myself, I could have wished at that moment to sink into the floor—to be unmarried—any thing, in short, that would have relieved me from existing responsibilities. Even the tablecloth was not—in its first day;—and all three, I should have mentioned, had come bounding, in the height of their good humour, into the dining-room. I shrunk from the room, rushed in trepidation to see what there was in a garde-mange where I well knew there was nothing, and finally, in desperation, dispatched our servant Betty—for we then had but one—in search of a beef-steak. During the absence of the girl, I returned to keep all right in the dining-room, where I found two out of the three gentlemen (now pretty well sobered down) musing with glaring eyeballs over lumps of dry bread, which, with a shameful defiance of the rules of epicurism, they were trying with all their might to swallow. "Well, Kate, what are we to have? and when are we to have it?" "You must just have a little patience, my dear, and I will do my best." This put them off for about three minutes, when again did my good-natured spouse inquire, with all the solicitude of Blue Beard's wife, whether any thing was *yet* coming. With a mind effectually discomposed, I tried by conversation, playing on the piano-forte, and bustling a little about, to beguile the weary time of waiting, often listening eagerly to hear and hail the expected beating of the steaks in the kitchen. Twenty minutes elapsed before that blessed sound met my ear; fifteen more passed ere Betty appeared with the dish. The cold lamb was placed at the foot, the steak at the head; potatoes supported on one side; on the other, lay the relic of a lobster, amounting to a head and one pair of clippers—

A dinner like my mighty self,

Four nothings on four plates of delf.

Apologies had in the meantime passed unreckonable, and been invariably declared by our guests to be unnecessary. They were really sorry to see me take so much trouble—any thing would do—light dinners were by far the best. On the removal, however, of the cover which had hitherto concealed the steak, their dinner proved to be any thing but light—in colour. The fire had been atrocious, and Betty, in the hurry, had smoked and burnt our steak out of all countenance. Each gentleman was helped, nevertheless, to a small crumby cinereous morsel, and, to do justice to the politeness of mankind, they ate two bites each at an average. Recourse was then had to the lamb, which at the most could not have sufficed for above two mouths. It was helped as sparingly as the steak; and our guests, I saw, contrived to make about half a dinner out of it. A few scraps still remained on the shank, and not one present, myself included, but, I am persuaded, would have been glad to gobble all up. Oh, to be behind a door, like Sancho, with this shank all to one's self! When asked round, however, not one would take another morsel. And so

some of my scanty feast was left, after all. The odd ends of the lobster, cheese, and a glass of good sherry, helped but poorly to eke out this miserable dinner; and yet it was not the want of viands that formed the worst part of the case. The mutual sense of embarrassment and difficulty was the true distress. My discomposure was beyond concealment: it was dreadful; burning on my cheeks and flashing in my eyes. James and his friends, though hearty at first, and, as they believed, indifferent to the fare which was to be set before them, found it so surprisingly bad, and were so much disconcerted by my evident misery, that they soon sank to my own level. I saw one of Tom White's best jokes die on his tongue, as the cover went off the steak. Their free bachelor manners became tamed into a cold and dull civility. The situation of all concerned was truly deplorable; and I do not believe a single word was spoken in the genuine spirit of mirthful fellowship, till a third rummer had rendered them in some degree oblivious of this, as well as all other woes.

At a later period of the evening, I did not fail, you may be sure, to give my husband a hint as to the impropriety of his conduct, which, I must say, he received in his usual meek spirit, promising amendment for the future. From what you know of him, however, you must be aware that he has a way of assenting and yielding to every thing one can impress upon him, and yet after all taking his own way, as if he had never heard a word on the subject. Whether it arises from absence of mind, or some other defect of character, I cannot tell; but it is the most provoking peculiarity in the world. Often, for instance, I will make an arrangement to walk out with him at a particular hour; off goes he at his own time, never once recollecting any thing about it. I will inquire of him if such a matter be not so, and so—he assents; but it is mere chance whether it prove so or not. I ask if he does not like this dish: he replies in the affirmative; and in three days, when I reproduce it, he will express surprise at my offering him such sorry stuff. There is no end to his tricks of this kind—for tricks I sometimes suspect them to be, notwithstanding all his protestations. But there is none of them so utterly intolerable as this habit of bringing home friends to dine, without warning. Never do I remonstrate, but he acknowledges that it is not acting fairly with me—and yet, let but a few days elapse, and lo, other three or four good fellows are seized upon 'Change, and dragged home, will they nill they, to meet a vision of grim scrags. On one occasion he brought three friends, after having informed me that he was not to dine at home at all, and when, accordingly, contenting myself with a lunch at an earlier hour, I had let both the fire and Betty out, and was just preparing to pay a visit to my mother. On another occasion, when we were at sea-bathing quarters, he picked up a couple of foreigners, of pleasing manners, who were perambulating the country, and brought them upon me, when I could not have got up a tolerable dinner without sending a dozen miles for it, and had hardly a room in which I could ask them to sit down. The mischief lies altogether in that friendly and easy character of his. He encounters an old acquaintance, with whom he has reminiscences to revive, or a new one, to whom he wishes to show some kindness; and, totally regardless of my interest in the matter, never casting a thought upon the possible state of my larder, or the confusion into which the house may have been thrown by washings lesser or greater, by our monthly *redding-up*, or, worst of all, by an incursion of the painters, home they must come with him. So gross an insensibility to all I have told him respecting the honour of our house,

\* A new-made wife, fu' o' frippish freaks,  
Fond o' a thing feat for the first five weeks.  
William Nicholson, a Galliverty poet.

a waywardness so irremediable, can hardly be natural: his conduct seems more like that of a man walking in his sleep than any thing else.

After long despairing of all other means of correcting him, I have resolved, my dear cousin, to request your assistance. An article from you will waken him, I am persuaded, if any thing on earth will; and such, I hope, you will soon administer.—I am, &c.

KATHERINE BALDERSTONE.

So far from taking up the case of my good friend Katherine in the way she desires, I would, in all humility, rather present something on the other side. It seems to me, most worthy and excellent Mrs James Balderstone, that you and other ladies allow yourselves to be a great deal too much put about by such incidents as those above described. Why! shall a gentleman not have liberty to entertain whom he pleases and when he pleases?—shall he not have the run of his own house? There may be extreme cases; but what is the risk of, occasionally, a scrappy dinner and a confused house, against the pleasure of a system of unpremeditated sociality! The plague is in the necessity under which the lady supposes herself to be of making a fine set-out! "Flesh and blude can stand this nae langer, Willie Gordon," said a Glasgow lady to her husband; "there ye've brought hame cripple Dick to his dinner, and naething in the house but a could hen." "Well, well, Mrs Gordon," said the gentleman alluded to, who, unknown to her, was washing his hands in a neighbouring dressing-room, and had overheard the speech, "cripple Dick can dine upon a could hen any day." Just so; the gentlemen in general are quite easy about the materials of dinner—care not indeed what it may be, if approaching to the quantity necessary for barely satisfying hunger. The lady, unfortunately, can never be brought to see the matter in this light. If the appetite and taste of an unexpected guest were transferred to herself, and decreed suddenly to become, the one the most ravenous and the other the most nice, she could not be more concerned to have her table loaded with delicacies. To him who daily regales himself in cold lodgings with a smoky chop, she regrets that she cannot offer venison and game. To him who cannot at any time eat many mouthfuls, she is grieved that she cannot display three courses. She would cram a plain commercial friend with unheard-of dainties, and dazzle a homely old uncle with a realisation of the feast of the Barmecide. The lady cannot understand why her husband should take such pleasure in inveigling his friends into a house where one cold scrag might be said to reign supreme, if it were not solitary; but the gentleman has surely as good a right to be surprised that, when he and his friends are inclined to be content, she, who has no real interest in the matter, should pine with vexation. I cannot but think it highly ridiculous to hear all their professions of satisfaction disputed and argued out of all likelihood, by one who should rather rejoice to hear that the fact is so. It seems very hard indeed, that, when one is disposed to be happy, another should mar the conclusion by a denial of its possibility.

I would, then, recommend my amiable cousin and all other ladies to moderate somewhat this vicarious appetite and taste which they find so ill to satisfy, and allow others to be pleased when they will. It is seldom that their larder can be altogether unfurnished; but, even when it is, they have only to attend to a recipe which I once saw in an old cookery book—one of those respectable compilations which flourished before the days of Meg Dods, but made up in seriousness of purpose what it wanted in wit. "If a large party should come unexpectedly, at a time when you have nothing in the house," so runs this apothegm, as I may almost call it, "you may take a cold turkey and hash it down in large pieces; stew well with butter, and, if agreeable to taste, a few onions: this, with a dish of artichokes, potatoes, French beans, or any other vegetables that may be in season, will make an excellent dish, and serve a good many people." After so effectual a remedy has thus been pointed out, I hope to hear no more of the distresses of housewives from extempore invitations.

#### CONSUMPTION.

[The following article is abridged from one which appeared in the 13th number of the Foreign Quarterly Review, and in which, from the respectable nature of its source, we are disposed to place confidence. Among the passages omitted is one descriptive of the use of the stethoscope; a subject which has already been illustrated in this Journal. Dr James Clark of London has recently treated the subject of consumption in a volume, of the merit of which we have been assured by an eminent Edinburgh physician, as well as by the opinions of the press. It is very judiciously devoted chiefly to an exposition of the means of preventing the disease. At a subsequent period we may perhaps give an extract from this work.]

THE chest, or that part of the body which is enclosed by the ribs, may be said to be entirely occupied by the heart and the lungs. The heart is one of the simplest organs in the body, composed of muscular fibres, and divided into four cavities, namely, a right auricle and ventricle, and a left auricle and ventricle. Red blood is sent from the left side of the heart into the aorta or large pipe leading from it, which soon forms an arch in the chest, and descends to carry blood to the abdomen and lower limbs; other vessels being given off from the arch itself, which supply the upper limbs and the head. Losing its florid colour in its course, the blood is brought back of a dark hue to the right side of the heart, by the veins; and before it again passes to the left side of the heart, it is

driven through the lungs, in them to be reconverted, by the action of the inspired air, into its florid or arterial state; after which it is again propelled into the aorta, to travel through the arteries as before. Just before the blood in the veins of the head and neck is transmitted to the heart, it receives, from a peculiar duct, a supply of chyle, which has been brought upwards along that duct from the organs of digestion, in a state to be mixed with the blood; and in the lungs the mixture becomes complete.

The lungs, in which this doubly important office of converting the chyle into blood, and the venous blood into arterial, is performed, cannot consequently but be regarded as organs of extreme importance; and it is found that their well-being is quite essential to health, and even to ordinary comfort. They are of great size, filling up all the chest not occupied by the heart. Their texture is light and spongy, and they are divided into innumerable cells, communicating with the countless ramifications from the two great divisions of the windpipe: these two main divisions, uniting at the upper part of the chest, form a cartilaginous tube, passing upwards along the front of the neck, and terminating superiorly in the larynx, of which the cartilages are distinctly felt at the upper part of the throat. At each inspiration, air is received between these cartilages, and through this tube, and passes down the windpipe into its two great divisions, and from them into every corner of the elastic and expanding lungs. Each little cell, or at least each minute ramification, to its very extremity, becomes dilated with air, and the admitted blood, travelling in small vessels along the walls of these cells, undergoes the changes already mentioned. The air is then expired, altered in its qualities, and the renovated blood passes to its destination in the left cavities of the heart; the next inspiration bringing fresh air into the cells, and more blood into the lungs to receive the benefit of it. This wonderful process, on which life hangs, is performed by day and by night, whether we are sleeping or waking, from birth until the last moment of life.

Now, the term pulmonary consumption has been applied to two distinct affections of the lungs. One of these, being nothing more than a chronic inflammation of the lining membrane of the windpipe and its many ramifications, is perhaps generally a curable disease. The membrane becomes very irritable, and even thickened or ulcerated, and sometimes the patient sinks under the malady. But this form is so often relieved, as not unfrequently to create an opinion of the probable cure of a true pulmonary consumption much more favourable than medical experience sanctions.

The nature of a true pulmonary consumption is this:—Numerous small, hard, greyish bodies are deposited in the soft, elastic, spongy tissue of the lungs themselves. These are, commonly at least, very numerous. They are sometimes in clusters, and sometimes scattered all through the lungs; sometimes confined to one lung, often extended to both. These small bodies are what, in medical language, are called *tubercles*. It is their nature to enlarge, and, beginning to soften in the centre, to break down into a fluid mass. The lung immediately surrounding a tubercle which is undergoing this change, becomes inflamed; a communication is established between the softened tubercle and one of the many ramifications of the air-passages, and thus the tubercle is expectorated in the form of a yellow or purulent fluid. When the tubercles are in a cluster, many commonly break down together, and, being expectorated, leave a considerable cavity in the lungs. If the tubercles are not numerous, all of them may be thus got rid of, the cavity may be obliterated, or cicatrised, and a person who has been affected with true pulmonary consumption may in this way actually recover. But this is a rare occurrence. The tubercles generally exist in great number. When some are softening, others are forming; and when the first are got rid of, the second have yet to be got rid of. This long process irritates the constitution; and the irritation being protracted, destroys life. The action of the heart becomes quickened, the stomach and intestines become highly disordered, the patient is tormented with hectic fever, and wasted to a skeleton; although often, notwithstanding these obvious sources of suffering and symptoms of decay, cheerful and full of hope to the last.

The progress of the tubercles through their changes of character is not always uniform; peculiarities of constitution and various accidents retard or accelerate those changes, and sometimes the progress is long suspended; all the symptoms of constitutional irritation for a time subside, and the friends of the patient delude themselves with the hope of a perfect recovery. Not unfrequently the symptoms suddenly reappear, and the disease becomes speedily fatal, even before the tubercles have undergone the ultimate changes which have been described.

The presence of tubercles in the lungs is generally first indicated by some slight oppression of the function of respiration. The chest seems not to be sufficiently expanded in the act of breathing, and the inspirations are short and frequent. Next in order comes a hard and peculiar cough, first heard, perhaps, in the winter or spring, but not disappearing in summer or in autumn. Sometimes there is a slight spitting of blood thus early, although that circumstance, taken by itself, is by no means decisive of the nature of the malady. Conjoined with habitual fre-

quency of pulse, or in a female with a defect or suspension of functions peculiar to the female constitution, it is a symptom well calculated to excite alarm. There is often little or no expectation; but the cough is distressing when the patient lies down at night, or begins to dress in the morning. The face and figure soon put on the peculiar external characters of consumption. The hair becomes thin, and the circumscribed scarlet hue of the cheeks is strongly contrasted with the paleness of the face and of the white part of the eyes. The shoulders seem pointed, and the chest narrowed. The hands become pale and slender: emaciation and debility keep pace together.

From the very commencement of the disease, the action of the heart and pulse is frequent, above a hundred pulsations being generally counted in a minute. Morning chilliness is succeeded by evening heat and thirst; and to evening hectic, for such the exacerbation soon becomes, succeed wasting night perspirations. The appetite for food is often little affected, although irritability of the stomach, and vomiting, are common. The bowels are generally irritable as the disease advances, and diarrhoea alternates with the night perspirations. The lining membrane of the air-passages becomes irritated, inflamed, ulcerated, or even studded with tubercles. Worn and harassed by these complicated sufferings, the patient still, very commonly, indulges in sanguine hope of recovery: there is in fact a mental excitement, which passes on, in the latest stage, to a mild delirium. The consumptive constitution is characterised by great susceptibility to impressions, and the delicate nervous system is readily excited, even before the disorder itself commences. With the commencement of the disorder, or soon afterwards, the signs of an irritable brain are generally very perceptible; the sensations of the patient become unfaithful, and the materials for a correct opinion of their actual condition being thus withheld, the patients entertain confident hope when all around them despair.

The cure of this disorder being so rare, the practitioners of medicine have anxiously sought for the means of prevention, by investigating, with much diligence, those circumstances in the constitution of the patient, and the local disordered actions, which predispose to the deposition of tubercles in the lungs. The majority of pathologists, we believe, will assent without difficulty to the proposition of M. Andral, that "pulmonary tubercles are the product of a morbid secretion."

What constitution of body most predisposes to the creation of tubercles in the lungs, can only be expressed by saying, that it is one of which the predominant feature is debility. This debility is often connected with a scrofulous character, but not invariably or necessarily. The progress of the ravages effected in the frame by the irritation which supervenes on the formation of tubercles, seems, however, to be more rapid and more marked when the patient is already affected with any form of scrofula. But consumption may unquestionably appear, and does unquestionably, we believe, appear in a majority of instances, in those who are not of a scrofulous constitution. An altered complexion, an unhealthy state of the skin, a disordered digestion, and many signs of imperfect health, and commonly of defective nutrition, precede the declaration of a decided phthisical affection; or the complaint arises in those who have been from their birth delicate, if not absolutely sickly. Circumstances of a nature to reduce the strength, and perhaps at the same time to affect the nervous system, may bring a healthy individual into that state in which tubercles may become formed in the lungs. Thus nothing is more common than for symptoms of consumption to appear not long after a patient has struggled through a fever; or for the complaint to be induced by a course of reckless dissipation; and we have seen it plainly brought on by deep and long-continued mental affliction. Frequent exposure to wet and cold, with its common consequences, frequent attacks of catarrh, undoubtedly dispose the lungs to disease, and to the creation of tubercles; and that poor diet may be a powerful predisposing cause, will readily be credited by those who know how invariably some of the inferior animals may be brought into a state of disease, and that tubercles are formed in their lungs at will, by confining them to particular kinds of food. Habitual confinement in a deteriorated air, in close apartments, in crowded manufactories, or in schools where a number of scholars are kept together for several consecutive hours, seems to be not an uncommon cause of that state of body which favours the development of tubercles. In these cases, the nervous and vascular systems are probably first debilitated, and the process of digestion is commonly also much impaired, before the phthisical disorder appears. To the predisposing causes M. Andral adds, want of sufficient exposure to the influence of the sun. Some of the diseases of early life—as the measles and hooping-cough—are presumed to dispose to the formation of tubercles, by producing a considerable accumulation of blood in the pulmonary tissue.

It is to be observed, that the age at which symptoms of consumption may appear is not so constant, or even so limited, as has frequently been asserted, and as many medical authors still assert. The age of puberty is attended in both sexes with constitutional changes, not effected without a degree of tumult, which becomes a

\* Phthisis, consumption; phthisical, belonging to consumption.  
—Ed. C. E. J.



source of both sanguineous and nervous disorder to the feeble constitution; and at this period consumption does, without question, very often show itself. More rarely, it is seen at an earlier age. But its super-vention at a later period is still more common than at the age of puberty. We are ourselves disposed, after some attention to this particular fact, to believe, that of all ages at which phthisis shows itself, the most common is that between thirty and forty. Instances have not been wanting in which the malady has become fatal at a much later time of life, or in which it has even made its first appearance in advanced age. M. Andral mentions the case of a patient of sixty-eight, who had enjoyed previous good health, and in whom symptoms of phthisis then first showed themselves; the complaint proved fatal after a few months, and numerous tubercles were found in both lungs; which, judging from the patient's health having previously been uninterrupted, would seem to have been recently developed.

The duration of the malady after it has been incontestably declared, is also very variable, or rather, to speak more correctly, the malady is capable of suspension for considerable intervals, with occasional returns, which at length prove fatal. In such cases the patient is generally more or less a valetudinarian; cannot endure much exertion; his respiration is soon oppressed, and his heart is irritable; he suffers much on every attack of common catarrh, and seems at last, from this cause, to fall into consumption. M. Andral says he has known individuals remain in this intermediate state, between illness and health, from early life to thirty or forty years of age.

Far more commonly, consumption destroys the patient in a much shorter time. The average duration of life, after the disorder is actually established, cannot be stated as greater than two years. Many patients are worn out by the disease much within that period; some sink in less than a year, and some are hurried to the grave in a few months, or, though more rarely, even in a few weeks. The latter description of cases are so striking, even to common observers, as to be designated, in popular language, *galloping consumptions*. Of these M. Andral gives some examples. In one, death took place four weeks after the first appearance of cough; in another, five weeks after the first symptom of ill health; in a third, the symptoms of phthisis had been observed in a slight degree for many years, without affecting the patient's health or strength; and then the softening and expectoration of tuberculous matter, occurring apparently for the first time, were followed by death in the short space of eleven days. It cannot be a matter of surprise that the patients are in these cases generally unconscious of their danger, and unprepared for death. We have known them chiefly complaining of symptoms which had little connection with the pulmonary disorder, and loath to acknowledge any cough or other affection of the respiratory organs, only a few days before they died of pulmonary consumption in the last degree.

Such being the hopeless character of consumption when once established, the fact of its establishment becomes of the greatest importance, and the means of determining either its absence or its presence cannot be too carefully studied. By these means, supposing them to exist, a protection may be given against the deceptions of the quack, who pretends to cure what does not exist; and in other cases, where the disorder is but too well established, a protection of another kind may be afforded to the unfortunate patients themselves, who may be spared the infliction of remedies which are powerless to heal, and may yet obtain much relief by palliative measures, adopted in consequence of sound views being entertained of the actual state of the lungs.

If we suppose the disease to be established, or tubercles to be actually formed in the lungs, there would seem to be two especial indications of treatment; namely, to prevent the progress of these foreign bodies, and to check the symptoms of irritation produced by them, not only in the lungs but in other organs. The presence of the tubercles is often declared more strongly by the super-vention of these secondary irritations than by any primary embarrassment in the functions of the lungs themselves. It is, consequently, against these secondary states that the efforts of the practitioner are very frequently directed; and some of them—inflammation of portions of the pulmonary tissue for example—demand the promptest attention, inasmuch as they tend to hasten the progress of the tubercles, before existing in a passive condition, into that stage in which they work the most serious effects on the general constitution. The means of preventing at once the inconveniences of the different supervening irritations, and the acceleration of the process of tubercular change, are, generally, all such as are calculated to prevent excitement of the vascular system. The presence of actual inflammation may make it necessary to prescribe moderate bleeding, and this may become again occasionally necessary, although the wasting character of consumption is sufficiently declarative of the impropriety of the repeated, and as it were periodical, bleedings, to which practitioners have sometimes resorted. Blistering the chest, as near as possible to the inflamed part of the lung, the exact situation of which may be ascertained by the stethoscope, is a powerful auxiliary to the venesection; and, in many cases, if resorted to after the application of leeches, may render it unnecessary to incur the inconvenience of a general bleeding. Irritations of the larynx and

trachea (windpipe), and also of the bronchial ramifications, may generally be alleviated by these means, and by other methods of producing external irritation; as well as that distressing disturbance of the stomach which is exceedingly troublesome to the greater number of phthisical patients. With the same intentions, various soothing medicines, chiefly mucilaginous and anodyne, are found to be serviceable; and the adoption of a system of diet which is moderately nutritious, but from which every thing that could cause excitement is carefully excluded. Every part of the regimen of the patient should be so ordered as to conform to this system; violent bodily and mental exertions, late hours, exposure to vicissitudes of weather, insufficient clothing, and every kind of irregularity, are to be diligently avoided.

By the early and rigid adoption of measures of this kind, many individuals in whose lungs tubercles actually exist, are enabled to maintain a condition of health very little interrupted, and the duration of life may, in some cases, be greatly prolonged. Both of the indications already mentioned are indeed thus simultaneously accomplished.

In variable climates like our own, there is always an additional difficulty to be contended against, arising out of the perpetual irritation of the air-passages, by the actual contact and unavoidable reception of the air itself. If, desirous altogether to avoid this inconvenience, the patient is restricted to the air of rooms of which the temperature is carefully regulated, the want of invigorating freshness is too often productive of general effects which induce some other disadvantages, both as regards the general health and the pulmonary disease; and if attempts are made to secure the benefit of that freshness which the external air alone can impart, hardly any care or watching can long prevent some accidental exposure, which brings on an aggravation of symptoms which it is most desirable to repel. The hope of securing the advantage, without incurring the counterbalancing disadvantages, produces the numerous annual migrations of the consumptive to various parts of foreign countries and of our own; and these again impart a high degree of interest to the character of particular countries of the Continent, or of particular islands to which so many sail in quest of health, or of particular parts of our own island, to which those who are unwilling or unable to leave their native country commonly resort.\*

#### THE NIGHT ATTACK.

[From *Wild Sports in the West*. London, 1832.]

It is thirty-five years, this very month, since I was quartered with my regiment in Waterford; I recollect the time particularly, for I got my company in the thirty-seventh on the same day that I received an invitation from a Mr. Morden, with whom I had formed a mail-coach acquaintance, to spend a week with him, and join his nephew in partridge-shooting. This gentleman's house was fourteen miles distant from the town, and situated in a very retired part of the country. It was a wild but beautiful residence, placed upon the extremity of a peninsula which jutted into an extensive lake. To a sportsman it offered all the inducements that shooting and fishing could afford. But it had others besides these; no man lived better than Mr. Morden—and his daughter Emily, and her orphan cousin, who resided with her, were decidedly the finest women who had attended the last race-ball. No wonder then that I accepted the old gentleman's invitation willingly, and on the appointed day put myself into a post-chaise, and reached the place in time for dinner.

The house was one of those old-fashioned, comfortable, Irish lodges, which are now extinct, or only to be seen in ruins. It was a long low building, covered with an infinity of thatch, which bade defiance to rain, cold, and storm. The tall and narrow casements reached the ground, a handsome flower-knot extended in their front, bounded by a holly hedge, and woodbine and other creepers festooned the windows with their leaves and berries. At some distance a well-stocked haggard peeped over a spacious range of offices; the lawn was studded with sheep, which appeared overburdened with good condition; and as I drove up the avenue, I passed a well-featured, well-clad simpleton, urging before him, from a neighbouring stubble-field, a flock of turkeys, as formidable for numbers as for size. In short, every thing about the place bespoke the opulence and comfort of the proprietor.

Mr. Morden was a clever and respectable man; he was land-agent to several large estates—noted for plain and unpretending hospitality, punctuality in business, and a character of unusual determination.

The old gentleman received me with friendly sincerity, and his handsome daughter added a warm welcome. They apologised for not having company to meet me, but "two families which they had expected had been detained by some unforeseen occurrences at home." Dinner was shortly after served. Like the host, it was excellent without display—the wines were superior—and when the ladies left us, the claret went round the table merrily.

"We are in trouble here," said Mr. Morden, addressing me, "and you have come to a house of mourning. We have just suffered a serious, I may say, irreparable

loss, in the sudden death of two favourite dogs. They were of the genuine breed of Newfoundland, and for size, courage, and sagacity, unequalled. Poor Emily has cried incessantly since the accident."

"Were they stolen?"

"Oh, no! I wish they were, for that would afford a hope that chance or money might recover them. No, sir, they would not follow a stranger; alas! they died yesterday by poison. We unfortunately laid arsenic in a meal-loft to destroy rats; and yet, how the poor animals could have got to it, is a mystery; the steward declares the key never left his possession. I would give an hundred guineas the meal had been in the bottom of the lake. No loss, short of the death of a friend, could have given us all so much uneasiness. They were my daughter's companions by day, and my protectors at night. Heigh, ho!—come, sir, pass the wine." Tears stood in the old gentleman's eyes as he spoke of his unhappy favourites; and from the valuable properties of the lost dogs, it was not surprising that their death occasioned so much regret to the family.

We joined the ladies in the drawing-room. After tea, Mr. Morden took a bedroom candle, and apologised for retiring. "Old habits best suit old people, captain; but I leave you with the ladies, who will sit up till cock-crow, if you please;" and bidding us a good night, he departed.

"Emily," said young Morden, "you are still thinking of your favourites; well, I will ride the country over, till I find you a handsome dog. Julia, hand me that violin from the piano, and Captain Dwyer will dance a reel with you and Emily."

"Gracious! who is at the window?" exclaimed Miss Morden, suddenly; "it looked like that nasty beggarman who has been haunting the house and grounds these three days. Ah, Wolf and Sailor! had you been living, that vagabond would not have ventured here at this late hour." Henry Morden had left the room on hearing his cousin's exclamation, but soon returned, assuring the lady that the beggar was a creature of her imagination; he had searched the shrubbery and flower-garden, and no mendicant was to be found in either.

The alarm was speedily forgotten, and we danced reels till supper was announced. The doors were locked, the windows fastened, the ladies wished us good night, and retired to their respective chambers.

Henry and I remained for some time in the eating-room; the clock struck twelve, and young Morden conducted me to my apartment, and took his leave.

I felt a strange disinclination to go to bed, and would have given any thing for a book. For temporary employment, I unlocked my gun-case, put my fowling-piece together, and examined whether my servant had sent all necessary apparatus along with me. I opened the window-curtains. The moon—a full, bright harvest moon—was shining gloriously on the lawn and lake; I gazed on the sparkling surface of the waters, till I felt the chill of the night-breeze; then closing the shutters, reluctantly prepared to undress.

I had thrown my coat and vest aside, when a distant crash was heard; and a fearful noise, with oaths and screams, succeeded. I rushed into the corridor, and encountered a terror-stricken maid-servant running from the extremity of the passage. Miss Morden next appeared; she was in complete dishabille, and had hastily thrown on a dressing-gown. "Oh! Captain Dwyer, what has occurred?" A volley from without prevented my reply, and the crashing of the windows, as the glass was splintered by the bullets, made it unnecessary. "The house is attacked," she said; and then, with amazing self-possession, added, "There are always loaded guns above the kitchen fireplace." We both ran down the corridor, she to alarm her father, and I to procure a weapon; young Morden, armed with a sword, met us. "The attack is upon the kitchen," he said, hastily; "it is our weakest point; this way, Captain," and we both entered it together.

There was a bright fire burning on the hearth. The large window was shattered to pieces; and the idiot I had noticed on the lawn was standing beside the ruined casement, armed with a spit, making momentary passes at the breach, and swearing and bellowing frightfully. I leaped upon a table to seize two muskets which were suspended in the place Miss Morden had described. I handed one to Henry, when the fire blazed out suddenly, and discovered me to the banditti without. Instantly three or four shots were discharged. I heard a bullet whistle past my head, and felt something strike my shoulders like a sharp cut from a whip; but having secured the gun, I jumped from the table uninjured. We heard Mr. Morden in the passage; his manner was calm and collected, as he ordered the servant-men to the front of the house, and dispatched his daughter for ammunition.

Meanwhile, a dropping fire continued from without; from within no shot had been returned, as the robbers sheltered themselves effectually behind the angles of the offices, and the piers of the gates. From some hurried words we overheard, they were arranging a determined attack.

"They will make a rush immediately," said the elder Morden, coolly; "and here comes Emily in good time; don't come in, love!" and he took some forty or fifty cartridges, which she had brought in the skirt of her dressing-gown. Notwithstanding the peril of our situation, I could not but gaze a moment

\* A further but shorter extract, treating the comparative merits of the principal places of resort for the consumptive, will be given in the next number of the Journal.

on this brave and beautiful girl. "Go, love, tell John to bring the captain's gun-case from his chamber; and do you, Emily, watch from the end window, and if you perceive any movement on that side, apprise us of it here. Now, my boys, be cool; I'll give my best horse to him who shoots the first man. You have a good supply of ammunition, if we could but coax the scoundrels from their shelter, and I'll try a *ruse*." The old gentleman took the idiot's spit, placed a coat upon it, while Henry and I chose a position at either side of the broken window. Mr Morden raised the garment to the breach; it was indistinctly seen from without; three bullets perforated it, and it fell. "He's down," roared a robber, exultingly. "Now, Murphy, now's your time; smash in the door with the sledge!" Instantly a huge ruffian sprang from behind a gable; his rush was so sudden that he struck twice with shattering force. We heard the hinges give—we saw the door yielding—and, at that critical moment, young Morden's gun missed fire! He then caught up an axe, and placed himself determinately before the door, which we expected to be momentarily driven in. Murphy, perceiving the tremendous effects of his blows, called to his comrades to "be ready." He stood about five yards from me; the sledge was raised above his head—that blow would have shivered the door to atoms. I drew the trigger—the charge, a heavy one of duck-shot, passed like a six-pound bullet through the ruffian's body, and he dropped a dead man upon the threshold. "Captain Dwyer," said Mr Morden, calmly, "the horse is yours!"

I had now received my own double gun, and gave the musket I had used so successfully to Henry Morden. The death of the ruffian with the sledge brought on a heavy fire from his comrades. Between the volleys, they summoned us to surrender, with fearful denunciations of vengeance, if we resisted longer. We were within a few yards of each other, and during the intervals of the firing, they poured out threats, and we sent back defiance. "Morden, you old scoundrel!" exclaimed the captain of the gang, "in five minutes we'll have your heart's blood." "No," was the calm reply; "I'll live to see you arrayed in cap and halter." "Surrender, or we'll give no quarter." "Cowardly scoundrel! come and try your hand at the sledge!" said the old gentleman, with a cold and sarcastic smile, as he turned his eye on me, where I was watching the door, with the confidence a man feels who has his own trustworthy weapon to depend upon.

"Morden! we'll burn the house about ye." "Will you put the coal in the thatch, O'Brien?" "Morden, you have a daughter?" and the ruffian pronounced a horrid threat. The old man shuddered, and in a low voice, tremulous with rage, he muttered, "O'Brien, I'll spare five hundred pounds to hang you, and travel five hundred miles to see the sight!"

"The coal! the coal!" shouted several voices, and unfortunately the scoundrels had procured one in the laundry. "Oh! they will burn us out," said Henry, in alarm. "Never fear," replied his cooler uncle; "the firing must have been heard across the lake, and we'll soon have aid sufficient." But a circumstance occurred almost miraculously, that averted the threatened danger. The moon became suddenly overcast, heavy rain-drops fell, and in an instant an overwhelming torrent burst from the clouds, rendering every attempt the robbers made to ignite the thatch abortive. "Who dare doubt an over-ruling Providence?" said the old gentleman, with enthusiasm; "surely God is with us!"

The storm which came to our relief appeared to dispirit our assailants, and their parley recommenced. "Morden," said the captain of the banditti, "you have Lord —'s rent in the house; give us a thousand pounds, and we'll go off and leave you."

"All I promise, I'll perform," said the old gentleman coldly. "O'Brien, for this night's work you have earned a halter, and I'll attend and see you hanged." "Dash in the door," exclaimed the robber in a fury; "we'll have the old rogue's heart out!" A volley of stones rattled against the door, but produced no effect, and again the robber parleyed. "Will you give us an hundred, Morden?" "Not a sixpence," was the laconic answer. Once more stones were thrown, shots discharged, and threats of vengeance fulminated by the exasperated villains. At last the demand was reduced to "twelve guineas, a guinea for each man." "They'll be off immediately," said the old gentleman; "they know assistance is at hand: would that we could amuse them for a little longer!" But the ruffians were already moving, and Miss Morden presently announced that they were embarking, twelve in number, in a boat. "Now for a parting shot or two," said Henry Morden. We picked up a dozen cartridges, and sallied from the house as the banditti were pulling hard across the lake. We opened a quick and well-directed fire, which they feebly, and without effect, replied to. While a musket-ball would reach them, we pelted them liberally with shot; and as we learned afterwards, mortally wounded one man, and slightly injured two others. As we returned to the house, we met some fifty countrymen, armed with all sorts of rustic weapons, coming to our relief. Without a moment's delay we launched boats, and set off to scour the country; and at noon, so prompt and vigorous had been the pursuit, that six of the gang, including the wounded robbers, were secured.

We reached the house completely exhausted by the exertions of the morning, and the fatigue of the pre-

ceding night. We refreshed ourselves, and went to bed; but previous to returning to my room, I visited the scene of action. Another blow, even a very slight one, must have driven in the door; and in the rush of twelve desperate ruffians, the chances would have been fearfully against us. Murphy lay upon his back; he was a disgusting object. The charge of heavy shot made as large a wound as a cannon-bullet would occasion. He was the strongest man I ever saw; not more than five feet eight inches in height, but his limbs, body, and arms, were a giant's; he was a blacksmith—a man of infamous character, and most sanguinary disposition.

Our escape from robbery was fortunate indeed; Mr Morden had seven thousand pounds that night in the lodge, for he had just received the rents of two estates. It was almost entirely paid in specie. This was of course known, and two desperate bands, who had kept the adjoining counties in alarm since the rebellion was suppressed, united, for the purpose of robbing Morden's house, and securing this immense booty.

The body of the smith was sent away—and having brought the battle to a close, I shall explain some matters connected with this daring outrage.

A man named Mitchell originated the intended robbery, and arranged the method of attack. He was a slight, low-sized person, but his activity was amazing, and no attempt was too hazardous for his desperate courage to undertake. On the morning of his execution (he, with the three others, was hanged the subsequent assizes) he gave us a cool detail of his plans.

The dogs were to be destroyed, and the premises reconnoitred. In the disguise of a beggar he effected both; laid meat, prepared with arsenic, for the poor animals; then made his way into the kitchen, and ascertained that the fastenings of the back-door were defective. He purposed surprising the family at supper, or forcing an entrance when they were asleep. The first attempt he made at the drawing-room, but quickly perceiving that he had been observed by Miss Morden, he retired hastily. A council was held by the robbers, and it was fortunately determined to postpone the attack until the family had gone to rest.

Nothing could be bolder or more likely to succeed, than Mitchell's desperate resolution. It was to leap feet-foremost through the window, armed with a dagger, and open the back door for his associates. He made the attempt, and fortuitous circumstances alone prevented its being successful. That very morning, a small iron bar had been placed across the window; it caught the robber in his leap, threw him back with violence, and the noise, attended with the outcry of the idiot, alarmed the family instantly.

Circumstances, they say, will often make men courageous. In this case it had the same effect on two beings of a very different description—a lovely girl and an idiot boy. Miss Morden throughout the trying scene displayed the coolest courage—and the poor simpleton, who commonly would avoid the appearance of a gun, armed with his spit, defended the breach like a hero.

We met at dinner. Julia, Miss Morden's cousin, would hardly venture to join us, for her brother rated her timidity severely. When the alarm was heard, the fearful girl buried her face beneath the bed coverings, and remained in pitiable agitation until the contest ended. Mr Morden took her from his daughter's arm, kissed her, and congratulated her on their delivery from the last night's danger.

"You little coward," said the old man, jocularly, "you must give your deliverer one kiss, for your preservation!" the blushing girl received my salute. Miss Morden took my hand. "You, too, Emily, will you not reward your protector?" Without coquetry she laid her lips to mine, and that kiss was a sufficient reward for twice the peril I had encountered.

For me no praises seemed sufficient; the successful defence was attributed to my exertions; and the fortunate shot that killed the villain smith, was never to be sufficiently commended.

My visit ended—I was in love with Emily; but then I had little chance of succeeding to the property, which afterwards, by a chapter of accidents, fell to me; and a company of foot was all my earthly riches. She was an heiress; would it be generous to take advantage of a casual service, and press a suit that would be as painful to refuse as unlikely to be granted? I mean (so says vanity) by Mr Morden. No; I overcame the temptation of risking a trial, and returned to Waterford, possessing the esteem and good wishes of every inmate of Mr Morden's mansion.

I was on parade some mornings after I rejoined the regiment, when a horse, splendidly accoutred, with a superb tiger skin, holsters, saddle, and every housing fit for a field-officer, was led into the barrack-yard by a groom. The animal was a perfect picture of symmetry and strength; a dark chestnut, sixteen hands high, and worth at least two hundred guineas. The groom presented me a letter—it was from Mr Morden—the horse was a present.

Emily and her cousin married most happily, and we have often met since. They treat me as sisters would a brother, and we frequently talk of the night attack upon the lodge.

Three years passed away: the gang had been incessantly followed by Mr Morden, and were extirpated, with the solitary exception of Captain O'Brien. Dreading the sleepless vengeance of that determined old man, this ruffian fled the country, and established himself in a disaffected district of the south.

In the interim I got a majority in the seventieth, then quartered in Cork. Soon after I joined, I happened to be field-officer of the day on which a notorious criminal was doomed to suffer. The regiment had given a guard, and curiosity induced me to attend the execution.

I entered the press-room. In a few minutes the malefactor appeared in white grave-clothes, attended by two priests. It was "mine ancient enemy," O'Brien! Suddenly the sheriff was called out, and after a short absence returned, accompanied by a plain, vigorous country gentleman, enveloped in a huge driving-coat, and apparently like one who had travelled a considerable distance.

I looked at the criminal; he was the ruin of a powerful man, and the worst visaged scoundrel imaginable. He was perfectly unmoved, and as the priests hurried over their Latin prayers, made a careless response whenever they directed him. The door leading to the drop was open; the felon looked out upon the crowd most earnestly. "He is not there," he murmured; "he caused my apprehension, but he will not see me die!" and added with a grim smile, "Morden, you neither kept your word nor proved your prophecy!" The muffled stranger stood suddenly forward—"I am here, O'Brien! I paid for your apprehension, and have come some hundred miles to witness your execution."

"Morden!" said the dying felon solemnly, "if a ghost can come back again, I'll visit you!"

The person addressed smiled coldly. "I found you unable to execute your threats while living, and, believe me, I apprehend nothing from you when dead."

The clock struck—the sheriff gave the signal—O'Brien advanced to the scaffold—the drop fell—and in two minutes he was a corpse.

#### MISCELLANEOUS OBSERVATIONS IN NATURAL HISTORY.

MY first observation relates to that species of marine animal which is known to naturalists by the name of *Medusa capillata*. It is a frequent inhabitant of most of the shores of this island, and may easily be distinguished from the other species of the same animal, by the remarkable transparency of its whole mass; and more particularly by some beautiful spots of bright purple, which are placed near the centre of its disc. I ought, perhaps, to remark, for the sake of some readers, that the class of animals, of which that alluded to in the following observation is a species, is commonly known in this country by the name of the *sea-blubber*, and is remarkable for several striking properties, which characterise some of its species, such as that of occasioning a feeling of irritation in the skin when touched, and of being phosphorescent in the dark. To a common observer, all the varieties of this animal appear to be merely masses of a transparent jelly, scarcely worthy of being ranked among the class of animals, and apparently driven, without the power of directing their course, by the varying direction of the winds or the waves. If, however, on a fine day, when the sea is calm, and when one of the species to which I now allude is swimming near the shore, an attentive eye be kept upon its movements, within a yard or two of the place of the animal, the following very beautiful and amusing appearance will be observed:—As the animal moves forward, it is constantly employed in forming its disc into a greater or less degree of convexity, while at every such change in the form of its mass, a fringe of most beautiful and apparently silky filaments, all around the circumference of the disc, is protruded into the water, and again withdrawn into the body of the animal, as it resumes its ordinary and more flattened appearance. These filaments proceed from the circumference of a circular space, which is placed near the centre of the animal, and may be distinctly seen passing from thence, in the form of rays, to the extremity of the disc. The progress of this animal is therefore performed, as the reader will understand from the foregoing remarks, by a species of spinning; and the kind of organisation by which this is effected, has always appeared to myself to be one of the most pleasing instances of the wisdom of nature with which I am acquainted, and adapted most happily to illustrate the remark, that some of the finest specimens of what is exquisite in structure, may be discovered in animals of the very lowest order.

I have only further to remark on this article, that, as the substance of the *Medusa* is gelatinous, and as this matter is soluble in common water, any person may procure the filaments I before noticed, by placing one of the animals possessing them in a basin of river water during forty-eight hours. At the end of that time, the substance of the animal will be found to have become entirely dissolved, leaving the filaments afloat on the surface.

For many years as a boy I was accustomed to travel to my parish-school, over a district of wild uncultivated country, extending for two or three miles; and when relieved from the more important duties of the day, our great amusement in the spring and summer months was to ramble over that country in search of birds' nests. Now, even in those days I was struck with many singular discoveries (for such I still consider them) in the economy of some birds, that I have not as yet seen explained, or even hinted at, in any scientific work which I have perused on the subject.



The lapwing or green-plover (*Tringa canellus*), it is well known, generally deposits its eggs in low marshy ground. It is not at the trouble of building a nest, as I have never observed more than a small round hole scratched in some little eminence, with perhaps a few particles of fog or dried grass between the eggs and the moist earth. It lays four eggs; and what I have to remark as deserving of consideration is, that, if the nest is discovered as soon as the bird has begun to lay, and you remove an egg, so as to allow only one or two to remain in the nest, the bird will continue to lay for ten or twelve days, nay, for weeks successively. If, however, you allow the number to reach four, it immediately begins to hatch, and there is no further deposition of eggs; but if any of the eggs are then removed, that is, after the natural number has once been completed, it immediately forsakes the nest, and prepares a new one. I have myself continued to remove the eggs for ten days at a time, and always found a fresh one every morning; and have often tried also to take away one after the ordinary number four had been completed, but always found the nest immediately forsaken.

I have tried the same experiment with the common lark. If you allow only one or two eggs to remain in the nest, the bird will go on to lay for a time indefinite; but if they reach three, the bird will hatch. The common number of eggs in a lark's nest is five; but it will hatch with three.

In former days, when cockfighting was more in vogue than at present, the great desideratum was a gamecock that had been hatched by a magpie. The being nursed by such a stepmother was considered as rendering the hero invincible. Yet no small degree of finess was necessary to beguile the pyet, and the being able to paint the hen's egg so as to impose upon that wily bird, was considered an acquirement of no trifling consequence among the knowing ones of those days. If the magpie discovered the egg, it was indignantly thrown out; but if the young bird was once hatched, she was even more attached to the stranger than to her own offspring. I have seen several gamecocks that first saw the light on the lofty summit of an old ash-tree that grew in my father's rail-yard. They were certainly much more sprited, and, if I may be allowed the expression, more cruel, than when hatched by their natural mother. If you disturb a magpie in her operation of building, she will immediately remove the sticks she has collected to another branch of the same tree, but much lower down than the one she first occupied.

It is a common practice in the country to set a hen, as it is called, upon ducks' eggs, and the agony which she suffers when she sees her young charge first take to their natural element, the water, has often been observed and remarked upon. The following anecdote may be relied upon, as the circumstance was observed by a gentleman of science as well as rank; and it occurred in the town or suburbs of Stirling.—A hen, which had been employed to hatch a duck's eggs, in the neighbourhood of a dyer's mill, where there was a small pond, was observed to exhibit the usual symptoms of terror and alarm when the ducklings first took to the water, but, by degrees, she became quite reconciled to their habits, and was accustomed, in great quietness, to enjoy herself on the banks while they gambled in the pool. For two or three years she uniformly brought out ducklings, and, at last, as regularly led them to the water as their natural dam would have done. In the course of time, however, she brought out a breed of chickens. These she immediately led to the side of the pool also, but when she found they did not enter the water, she became quite uneasy—called them close to it—made every motion for them to enter it—flew over to the beetling stone in the centre of the pond, and then called on them to follow; but all to no purpose. When she found that nothing would entice them to enter the water, she actually seized upon one or two of them, and threw them into it, and if she had not been prevented, it is believed she would have drowned her whole progeny. This shows how much the native habits of even fowls may be changed by circumstances, and proves, in some degree, the existence of memory, without judgment, in the feathered tribes.

A gentleman in the county of Stirling kept a greyhound and a pointer, and, being fond of coursing, the pointer was accustomed to find the hares, and the greyhound to catch them. When the season was over, it was found that the dogs were in the habit of going out by themselves, and of killing the hares for their own amusement. To prevent this, a large iron ring was fastened to the pointer's neck by a leather collar, and hung down, so as to prevent the dog from running or jumping over dikes, &c. The animals, however, continued to stroll out to the fields together; and one day, the gentleman, suspecting all was not right, resolved to watch them, and, to his surprise, found, that the moment they thought they were unobserved, the greyhound took up the iron ring in his mouth, and, carrying it, they set off to the hills, and began to search for hares as usual. They were followed, and it was observed, that whenever the pointer scented the hare, the ring was dropped, and the greyhound stood ready to pounce upon poor puss the moment the other drove her from her form, but that he uniformly returned to assist his companion when he had accomplished his object.\*

\* Edinburgh Magazine, 1818.

## BIOGRAPHIC SKETCHES.

FRANCIS BACON.

BORN in London, January 22, 1561, this illustrious philosopher was the son of Sir Nicholas Bacon, lord-keeper of the great seal, and Anne, daughter of Sir Anthony Cook, tutor to Edward VI. The sprightliness of mind which he displayed in boyhood caused Queen Elizabeth to converse with him frequently, and to style him her young lord-keeper. In 1573, he was entered a student at Trinity College, Cambridge, where the progress of his intellect was so very rapid, that, before completing his sixteenth year, he had satisfied himself of the futility of that Aristotelian philosophy which had bewildered the human intellect for centuries, and which he was destined to supplant by the true philosophy since pursued with so much advantage to mankind. At this period of his life, he was placed under the charge of Sir Amias Powlet, the queen's ambassador in France, where he gathered a vast quantity of facts useful to an English statesman, which he formed, before his nineteenth year, into a Treatise on the State of Europe. The unexpected death of his father having obliged him to choose a profession, he adopted that of the law, and studied it with great assiduity at Gray's Inn, but without neglecting philosophical pursuits. It was here that, at the age of twenty-six, he formed the first sketch of his great work, "The Instauration of the Sciences."

His first preferment was to the post of counsel extraordinary to the queen, which brought him rather honour than profit. His contracted circumstances leaving him no other choice than between virtuous poverty and the dependence of a courtier, he was so unfortunate as to choose the latter. He was at first an adherent of the Earl of Essex, who used every exertion to obtain his advancement, but was thwarted at every step by the secretary Cecil. Afterwards, when Essex lost the favour of the queen, and became a rebel against her authority, Bacon, in whom the selfishness of ambition had deadened every better principle, consented not only to plead against him, but disclosed some confidential letters, which went a great way to prove his guilt. Against such unworthy and heartless conduct, this period of his life only presents some rather spirited appearances which he made in the House of Commons, in behalf of the popular rights.

Till the accession of King James, Bacon made little advance either in reputation or in fortune. His learning having recommended him to the king, he was knighted, and appointed king's counsel, with a salary of forty pounds a-year. In consideration of the merit of his work "On the Advancement of Learning," published in 1605, he was appointed, two years after, to the post of solicitor-general; and about this time his practice as a lawyer became both extensive and profitable. If Bacon had been content to wait upon fortune, he could have hardly failed, with the first abilities of his time, to reach, without discredit, the highest honours of the state. But the eagerness of his ambition, joined to a certain softness and facility of disposition, by which he was disabled, as it were, for the entertainment of high and manly principle, caused him to seek elevation by means which have stamped his name with infamy. Not only was he content to present an almost impious kind of flattery to his weak sovereign, but he stooped to become the minion of a minion, namely, Villiers Duke of Buckingham, who had been recently raised from obscurity to the highest court honours, merely on account of his possessing a handsome person. By such means, and by writing to the king a letter studiously depreciating all the other great lawyers of his day, he obtained, in March 1617, the appointment of lord-keeper, and, two years after, that of lord chancellor, with the title of Baron Verulam, subsequently exchanged for that of Viscount of St Alban's.

Without apparently gaining much personal esteem, Bacon had at this time obtained the highest reputation as a philosophical writer. To the *Proficience and Advancement of Learning*, published in 1605, and afterwards republished in an extended form, was added, in 1620, the *Novum Organum*, which was designed as a second part of his grand work, the *Instauration of the Sciences*. Another portion, intended to complete the work, was never produced. The objects of the whole work, were, to answer the objections made to the progress of knowledge, to classify the branches of knowledge, and to explain a new method of employing the faculties for the increase of knowledge; namely, to ascertain facts in the first place, and then to reason upon them towards conclusions—a mode which may now appear very obvious, and even unavoidable, but which was nevertheless unknown till explained by him. To come to particulars, Bacon tells us,

"I. That the ultimate aim of philosophical investigation is to bring the course of events, as much as possible, under our own control, in order that we may turn it to our own advantage.

II. That as each event depends upon a certain combination of circumstances which precede it, and

constitute its cause, it is evident we shall be able to command the event, whenever we have it in our power to produce that combination of circumstances out of the means which nature has placed within our reach.

III. That the means of producing many events which we little dream of, are actually placed within our reach; and that nothing prevents us from using those means, but our inability to select them from the crowd of other circumstances by which they are disguised and surrounded.

IV. That therefore we should endeavour, by diligent observation, to find out what circumstances are essential, and what extraneous, to the production of each event; and its real cause being stripped free from all the perplexing concomitants which occur in nature, we shall perceive at once whether we can command the circumstances that compose it or not. This, in short, is to generalise; and having done so, we shall sometimes discover that objects, which of all others appeared the most useless, remote, and inapplicable to our purpose, possess the very properties we are in search of. Nature stands ready to minister to our designs, if we have only the sagacity to disentangle its operations from one another, to refer each event to its real source, and to trace the powers and qualities of objects into their most abstract form.

In pursuing the dictates of this noble philosophy, man is no longer impotent and ridiculous. He calmly vanquishes the barriers which oppose his wishes—he eludes the causes of pain—he widens the range of enjoyments, and, at the same time, feels the dignity of intellect, which, like a magician's talisman, has made all things bow before his feet.

To this extraordinary individual we are indebted also for an attempt to reduce the chaos of literature into some degree of order; and to show that, notwithstanding the multiplicity and variety of books, there are only three different objects, to one or other of which the contents of every book must apply. According to Lord Bacon, human knowledge is resolvable into history, philosophy, and poetry. By history, is meant a statement of particular events which have occurred in past time. By philosophy, is meant the knowledge of general facts, concerning the relation of one phenomenon to another. By poetry, is meant an assemblage of ideas brought together for the purpose of exciting emotion.

Lord Bacon's Essays are by no means the least part of his philosophy. Wisdom has never appeared in a garb so closely adapted to her person. Every subject is treated with a clear and luminous brevity, which places the propositions side by side, without any intermediate ornament. A florid discourse may astonish us, but it is a simple one like this which enables us to arrive at conclusions. "These essays are the most popular of his writings, being devoted to subjects and involving thoughts which, as he says of them himself, 'come home to men's business and bosoms.' They often unite the most profound philosophy with the most fanciful illustration and poetical language, and sometimes display an almost scriptural pathos, as in the following beautiful passage—

"The parts and signs of goodness are many. If a man may be gracious and courteous to strangers, it shows he is a citizen of the world, and that his heart is no island cut off from other lands, but a continent that joins to them. If he be compassionate towards the afflictions of others, it shows that his heart is like a noble tree that is wounded itself when it gives the balm. If he easily pardons and remits offences, it shows that his mind is planted above injuries, so that he cannot be shot. If he be thankful for small benefits, it shows that he weighs men's minds, and not their trash."

Another specimen of Bacon may be given from his praises of learning:—"Learning taketh away the wildness, barbarism, and fierceness of men's minds; though a little of it doth rather work a contrary effect. It taketh away all levity, temerity, and insolency, by copious suggestion of all doubts and difficulties, and acquainting the mind to balance reasons on both sides, and to turn back the first offers and conceits of the kind, and to accept of nothing but [what is] examined and tried. It taketh away all vain admiration of any thing, which is the root of all weakness: for all things are admired, either because they are new, or because they are great. \* \* \* If a man meditate upon the universal frame of nature, the earth with men upon it (the divineness of souls excepted) will not seem more than an ant-hill, where some ants carry corn, and some carry their young, and some go empty, and all to and fro a little heap of dust. It taketh away or mitigateth fear of death, or adverse fortune: which is one of the greatest impediments of virtue, and imperfection of manners. \* \* \* Virgil did excellently and profoundly couple the knowledge of causes and the conquest of all fears together. It were too long to go over the particular remedies which learning doth minister to all the diseases of the mind—sometimes purging the ill humours, sometimes opening the obstructions, sometimes helping the digestion, sometimes increasing appetite, sometimes healing the wounds and ulcerations thereof, and the like; and I will therefore conclude with the chief reason of all, which is, that it disposeth the constitution of the mind not to be fixed or settled in the defects

\* Life of Bacon, prefixed to an Edinburgh edition of his *Essays*, 8vo. 1617.

thereof, but still to be capable and susceptible of reformation. For the unlearned man knoweth not what it is to descend into himself, and call himself to account; nor the pleasure of that most pleasant life, which consists in our daily feeling ourselves become better.\* The good parts he hath, he will learn to show to the full, and use them dexterously, but not much to increase them; the faults he hath, he will learn how to hide and colour them, but not much to amend them; like an ill mower, that mows on still and never whets his scythe. Whereas with the learned man it fares otherwise, that he doth ever intermix the correction and amendment of his mind with the use and employment thereof."

From the glories of the sage, it is our painful duty to revert to the infamy of the courtier. In his capacity of chancellor, Bacon displayed the same servility to the king and Buckingham as before, affixing the great seal to many patents which were intended as instruments of extortion in behalf of the royal favourite. In 1621, these abuses became the subject of investigation by Parliament, when it was discovered that Bacon had also accepted bribes from suitors in the Court of Chancery. A committee of the House of Lords, appointed to inquire into the latter delinquencies, brought no fewer than twenty distinct charges against him, comprising sums which amounted to several thousand pounds; and Bacon, with his natural pusillanimity, could only meet them with an abject confession. He was sentenced to pay a fine of forty thousand pounds, to be imprisoned in the Tower during the king's pleasure, and to be for ever incapable of holding any office or employment, and never again to sit in Parliament, or to come within the verge of court.

Overwhelmed with the infamy of this sentence, he retired to solitude. During the remainder of his life, under the discouragement of public censure, a heavy burden of debt, and the still greater pressure of self-reproach, he yet retained so much vigour of intellect, and warmth of fancy, as to be capable of producing writings of singular merit, in history, morals, and philosophy. In his humiliated state, he found some comfort in comparing himself with three great men of antiquity, Demosthenes, Cicero, and Seneca, all of whom, after occupying high stations in their respective countries, had fallen into delinquency, and been banished into retirement, where they consoled themselves with letters and philosophy. These examples, he declares, confirmed him in the resolution, to which he was otherwise inclined, of devoting the remainder of his time wholly to writing. Yet even now neither philosophy nor experience had perfectly taught Bacon the lesson of moderation. After his release from the Tower, which was soon granted him, and the entire remission of his sentence which was by degrees obtained, when the king's indulgence had yielded him a pension of £1200 a-year, in addition to the grant which he retained of £600 a-year from the Alienation-Office, and £700 which he derived from his own estate, he still lived at a great expense and sometimes appeared in splendour. It is said that the Prince of Wales, one day observing, near London, a coach followed by a considerable number of people on horseback, was told, on inquiry, that it was Lord St Alban's, attended by his friends; upon which his highness said, "Well, do what we can, this man seems to go out like a snuff." It was no inconsiderable aggravation of the folly of this prodigality, that he was still encumbered with a heavy load of debt: though, about the time of his fall, he found means to discharge arrears to the amount of eight thousand pounds, he died in debt upwards of twenty-two thousand. Yet Bacon's greatest weakness was not so much a high opinion of himself, as an inordinate thirst for the good opinion and applause of others. With more self-esteem he might probably have been more virtuous. When the French ambassador flattered him by saying that he had never before been in the company of an angel, he remarked, "If the politeness of others compare me to an angel, my own infirmities remind me that I am a man." It was a striking proof of his self-command, that, receiving from a friend an account of the failure of an application at court for some important favour, at the moment when he was dictating to his chaplain an account of some philosophical experiments, he calmly said, "Be it so," dismissed his friend with thanks for his services, and turning to his chaplain, and saying, "Well, sir, if that business will not succeed, let us go on with this, which is in our power," continued to dictate for some hours, without hesitation of speech or apparent interruption of thought.

He pursued his philosophical researches to the last in the midst of bodily infirmities brought on by intense study, by multiplicity of business, and, above all, by anguish of mind. In his letters to the king for the remission of his sentence, he is perpetually reckoning how old he is in misery, the date being from his fall. In the winter of 1625, he found his health and spirits much impaired. In the spring of the following year, making an excursion into the country to try some experiments upon the preservation of bodies, he is supposed to have been affected by some noxious effluvia, as he was suddenly seized with pains in his head and stomach, which obliged him to stop at the Earl of Arundel's house at Highgate. Here, after a week's illness, he expired on the

\* This expression is given in the original in Latin.

9th of April 1626, in the sixty-sixth year of his age. He was buried in the chapel of St Michael's church, within the precincts of old Verulam. "When we visit his monument," says an eloquent writer, "it should be with a sacred awe, which forbids us to remember his frailties. Envy loves to whisper that he died in disgrace; but gratitude proclaims that he still lives and flourishes in the advancement of science; and when we behold around us the giant powers of nature performing whatever tasks man chooses to assign them, we may say to the departed philosopher, in the words of Shakespeare, 'Oh, St Alban's, thou art mighty yet, thy spirit walks abroad!'"

### THE STOCK-JOBBER.

PERHAPS no vicissitudes to which speculative men are liable, have exhibited more wretchedness than those which have arisen out of transactions on the London Stock Exchange. The immense capital which is there subjected to the genuine demands of some individuals, and to the illegal uses of others, produces an assemblage of persons, surprisingly shrewd and active, stimulated by an ever-restless desire to gain by the fluctuations to which the stocks are liable. Stock, in a general sense, means the public funds of Britain, and consists of sums which have, at different times, been lent to the government on condition of receiving interest until the principal shall be repaid. When merchants require capital for great commercial purposes, money is drawn from the stocks, or funds, to an enormous amount, and the value of the remaining stock is proportionably increased. When the unemployed capitals of merchants and others are placed in the stocks to any great extent, the value of the whole accumulated amount of stock is in proportion reduced. Like all marketable commodities, the value of money is raised by scarcity, and depressed by superabundance. Circumstances of a political nature will often seriously affect the money market, raising or lowering the price of stocks twice in a day. Any individual possessing money in the funds can sell out, as it is termed, which means relinquishing his title, or transferring, on the days of transfer, his right to another, whose name is consequently inserted in the books connected with the particular stock in which the transaction may occur.

There are transactions of a very different nature, connected with the Stock Exchange, which have been pursued to a disgraceful extent. All sorts of artifices, including falsehoods, are adopted, to produce effects on the money market, and of which advantage may be taken. There are also "time-bargains," which are illegal contracts, or engagements, between speculators and gamblers, who perhaps have no property in the funds. They agree, that, on a specified future day, the difference in value of a nominal sum in some particular stock, or consols, as may be agreed upon, shall be paid over to the individual in whose favour the rise may be determined; accordingly, when the settling-day arrives, the amount of the wager is paid to the winner. Disgraceful exposures have occurred of extraordinary means having been resorted to for the purpose of producing an effect on the funds, by jobbers and gamblers.

Connected with improper transactions on the Stock Exchange, an example may be given that not very long ago excited the attention of many persons in one of the suburbs of the metropolis. Mr Thomson was a tradesman of considerable shrewdness, and doing what is called a pretty little business, by which he obtained all that was necessary to the comforts of life. He also managed to obtain an appointment as collector of rates and taxes, in a wealthy district, on furnishing bondsmen to the amount of twenty thousand pounds. Some people conduct themselves remarkably well in society, as long as they are not under any temptation; but no sooner are large sums of money placed in their power, than they become bewildered with the possession; and having no basis of principle, they are easily turned aside into practices of a disgraceful nature. Such was Thomson, the hero of our story. He did very well till he became a collector of public money, when, without reflecting on what might be the consequence of his folly, he began a practice of speculating on the Stock Exchange; and although he risked his reputation, the public property, and the welfare of his bondsmen, he could not withstand the temptation. He first ventured on a large purchase of Spanish bonds, and was successful; a few hundreds became thousands with the effect of magic. From what might have been termed a plodding existence, he started into comparative affluence. Another lucky hit

quite intoxicated him with success; all he touched seemed to prove advantageous to his fortunes.

As his wealth increased, he drew around him the usual groups of adulators and sycophants who attend on the opulent, and whose subservient established all that the weakness of his understanding suggested; he therefore became the slave of folly and ostentation. He was delighted at hearing himself praised as a speculator, and was in ecstasies at a puff-paragraph in one of the public prints, for which he had previously paid. But with all this sudden increase of riches, Thomson was not a happy man; something was always wanting; he durst not let himself think, and when left by his companions he became capricious and tyrannical.

Mrs Thomson, an excellent woman, who, when the family prospects appeared confined, had been selected for the endowments of her mind, now occasionally remonstrated with her inflated spouse on the egregious folly of his proceedings. She represented to him the error of concluding that extravagance was synonymous with comfort, and plainly said that it was as ill suited to her love of tranquillity as it was to the preservation of his health and reputation. This was not to be endured; he scorned the admonition, and peremptorily forbade the monitor his presence. Ignorance cannot bear reproof; she had offended past forgiveness; and, strange as it may seem, the amiable Mrs Thomson was compelled to quit the home she could have graced, and meekly retired on a mere pittance to a distant village. Freed from what he deemed an incumbrance, the heedless Thomson pursued his idea of happiness. Such had been his extraordinary success on the Stock Exchange, that it was suspected he possessed some means of obtaining information not given to the general ear; such was his good luck at the gaming-houses he frequented, and such was his gain as a contractor, that it was concluded his fortunes were augmented by some kind of improper means. A short period of time unfolded the nature of his transactions. A sudden convulsion in the monied interest in which he was engaged, together with a depreciation in the value of a foreign loan in which he had deeply involved his fortune, instantaneously prostrated his fortune in the dust. Luckily he was not a defaulter with respect to public property, as his pride had caused him to relinquish the office of collector of rates, and pay up his arrears.

The result of Thomson's unlucky ventures and losses, was a species of mental derangement, which for a short time affected him. He raved about bonds, bills, consols, and securities, as things in his possession; but all were gone. He asked for his companions—they had deserted him, after the usual manner of parasitical dependents. No one was found to alleviate his sufferings, save his discarded wife. That gentle being, forgiving and forgetting all her wrongs, flew to his aid; she endeavoured to console him by all the means in her power, raised him from despair to a consciousness of life and hope, and inspired a belief, that, although greatness had departed, happiness might still be secured. She continued closely attendant and solicitous to procure the restoration of his health, while legal proceedings and seizures pressed hard on the remnant of his property; even the little that might have been converted into use for future exigencies, merged into the general ruin, and they were left nearly destitute. Without a friend, without a home, the world that lately bloomed so luxuriantly appeared a sterile desert; they seemed alone amid thousands; not one heart sympathised with them, nor was there one friendly hand to avert the most abject wretchedness.

Part of a very humble dwelling, in an obscure back lane, was taken by Mrs Thomson, to which they removed, and for a time their immediate necessities were supplied by the sale of a few trinkets, of which the unfortunate lady had not been deprived. On these they contrived to subsist until he gained strength, and was enabled to contemplate the miserable state to which he was reduced. He grew morose or furious, as the bitterness of adversity pressed upon him. His ravings against a world, which he insisted had treated him with unparalleled cruelty, were loud and incessant, while for days he paced his room, or lay on his humble pallet, in a state bordering on distraction.

In this extremity of hopeless misery, Mrs Thomson, by chance, met one of their former intimates, to whom she related a few of their sufferings. The listener despised the husband; but the sorrows of the wife called forth an expression of sympathy, and a



purse was administered, containing a few sovereigns and coins of lesser value. This accidental relief called up the ruling passions of this ill-assorted couple. The wife, ever thoughtful, proposed that a small stock of trifling articles should be purchased, and that she, with a basket over her arm, would endeavour to obtain the little that was now required to sustain existence. The wretch spurned the idea as derogatory; he would not entertain a thought so contemptible, and therefore proposed that he should put himself in fortune's way by attending one of the lower order of gambling houses. Nothing venture nothing have, said he, exultingly; and despite of every objection which the prudence and humility of the wife could suggest, the passion and the propensity of the gambler prevailed. He went—he lost—even the last shilling vanished; and he returned in a state of phrenzy and intoxication to his disconsolate wife. With woman's kindness she again administered every aid, and endeavoured to console him; and although her heart was bursting with anguish, she watched him with unremitting care. But nothing more could soothe him into resignation—his brain was too surely affected with madness.

In this melancholy state the hapless couple were taken to the last refuge for the destitute—the poor-house. In a few days Thomson showed symptoms of returning consciousness; self-condemnation appeared in all his looks and actions, but he was never heard to speak after being informed where he was. He felt his pride insulted; and in less than a month he died, the victim of an acute fever of the brain. Mrs Thomson paid the last tribute to her departed husband, and then accepted of a comfortable home which had been provided for her by a few worthy persons, who knew and could appreciate her virtues.

The fate of this infatuated man is not without its lesson to those, who, like him, may imagine that there exists some partial agency that turns the ordinary events of life to success, independently of moral exertion. The knave and the sluggard may cherish such a hope; but they will perish in the delusion. He who knows the value of reputation, or possesses the pride of independence, will regulate his expenditure by his honest receipt. Such a man can never be subjected to what is called the "frowns of Fortune," nor be ruined in his prospects by gambling, nor injured by reverses arising from speculations on the Stock Exchange. He will move in confidence, however humble his path; and, protected by his integrity, his journey through life will be satisfactory to himself, and worthy the imitation of others.

#### METEORIC SHOWER IN AMERICA.

A REMARKABLE fall of meteors took place in North America in November 1833, which was amply described in the newspapers. If the speculations of some men of science on this phenomenon be correct, it either reveals to us the existence of a new and curious class of bodies in the solar system, or it discloses to us new properties in bodies previously known. We are not aware that any connected view of the facts, and the conclusions drawn from them, has yet been published in this country. What follows is derived from various papers in Professor Silliman's Journal.

On the morning of the 13th November 1833, from midnight to six o'clock, the whole horizon was filled with fiery meteors or shooting stars, as far as the eye could reach. They seemed to take their course from a single point, a little S.E. of the zenith, shooting to every quarter of the compass; they were of all sizes, from a small point to three times the diameter of Venus; and the larger ones left a train of light in their course, which continued for some minutes after their extinction, resembling a white cloud, which moved upwards, curving, undulating, and changing its shape, till it vanished. Some of these luminous or phosphorescent clouds occupied six or eight degrees in length, and one in breadth, the colour not fiery, but silvery, like moonlight on a thin transparent cloud. The meteors shot downwards with great rapidity, some descending to within ten or fifteen degrees of the horizon, but none reached it. There was no report heard, and no solid substance fell, so far as known. The sky was perfectly free of clouds; but the atmosphere had a yellowish tinge, and was so very luminous as greatly to obscure the fixed stars. A few meteors were seen as early as nine or ten P.M., and they continued till after six, but were most numerous from twelve till four. They were described as so thick and abundant that they resembled a snow-shower, and many ignorant persons thought them miraculous. They were observed with nearly the same appearance at sea and on land, from Lake Superior to the middle of the Mexican Gulf, and from 60° W. longitude to 90°, over a space greatly exceeding a thousand miles each way.

The meteors seemed to diverge or radiate from a given point, the position of which was noted by its place among the constellations. The paths of the meteors were not seen to commence at this point, but by tracing them backwards they seemed to meet in it. The meteors seen farthest from this centre had long apparent courses; those seen nearer to it, shorter; and at the centre itself, some observers noticed what they deemed a nebulousity, in which slight flickering motions were discernible; and now and then a luminous point would present itself, swell gradually on the sight, and then vanish, presenting exactly the appearance which a meteor would have when travelling right

towards the spectator's eye. This radiating centre did not move eastward with the earth in its diurnal course, but kept its place nearly stationary in one part of the heavens, that is, in one constellation. The path of a meteor generally extended to 30° in length, and the time from two to three seconds. Among the meteors, two or three, coming comparatively near to the observer, seemed to be as large as the moon, and, from their height, have been supposed to be two or three hundred feet in diameter.

Humboldt and Bonpland witnessed a similar shower of meteors in Cumana in 1799, and what is remarkable, it was also on the 12th November. On the 13th November 1831, an extraordinary fall of meteors was observed in Ohio; and on the same day, in 1832, at Mocha, in Arabia, by the captain of an American trader, and by another on the same night, in the middle of the Atlantic (lat. 43. long. 40); the phenomenon in both cases being entered in the log-book.

We cannot go into the minute details collected, in order to furnish data for inferences as to the nature and source of the meteors. We shall only observe, that from observations made in places at a distance from one another, the parallax of the radiating point was found approximately [parallax is the angular change of position which an object undergoes when observed from different localities], from which its height was calculated; and Professor Olmstead of Yale College thinks that the facts ascertained afford a basis for the following conclusions:—

1. The meteors of November 1833 had their origin far beyond the limits of the atmosphere, at the height of about 2200 miles above the earth, and they had no connection with electricity or the aurora borealis.
2. They were attracted to the earth by the force of gravity, and descended in straight lines nearly parallel, their apparent divergence being the effect of perspective.
3. As the lightest and heaviest bodies fall through empty space with the same velocity, these meteors would enter the atmosphere (which extends about fifty miles above the surface of the earth) with a velocity of four miles per second, or ten times greater than that of a cannon ball.
4. They were composed of combustible matter, remained invisible while in free space, but took fire and were consumed in traversing the atmosphere, the larger ones leaving a cloud visible for some minutes, the product of the combustion. The ignition was probably caused by the compression of the air before them in their rapid course.
5. They were composed most probably of light nebulous matter, similar to the tails of comets.

From what body did they come? The professor shows that the facts do not consist with the supposition that the *nebula* was wandering lawless through the planetary spaces, or that it was a satellite of the earth, revolving round it like the moon. After weighing all the facts, he concludes, that it revolves round the sun in six months, from left to right, like the earth, and in an elliptical orbit which is nearly in the plane of the ecliptic; that this orbit lies within the earth's orbit, touching it in its aphelion (or point of greatest distance from the sun), and having its perihelion (point of least distance) within the orbit of Mercury. The *nebula* was probably of great size, for an unusual light, like the zodiacal light, preceded the dawn on 13th November, and was visible after sunset in the beginning of December. The meteors consisted of the extreme parts of this *nebula*, detached from the mass by the earth's attraction, and falling down in a fiery shower.

If these conclusions are sound, an extraordinary fall of meteors might be looked for about the 12th or 13th November, not perhaps every year, but frequently; and we may well suppose that the Americans were on the watch when that day came round in 1834, for materials to prove or disprove the hypothesis. The result did not entirely disappoint them. The phenomenon wanted the splendour of that of the preceding year, but there was an unusual number of meteors; they seemed also to radiate from a common centre, and that centre was in the constellation Leo, as in 1833. The zodiacal or pseudo-zodiacal light also appeared from the middle of October to December, and changed its place in reference to the sun, exactly as the hypothesis required.

Upon the whole, the hypothesis has a sufficient degree of probability to entitle it to attention, but it must still be considered as under trial. It is perfectly credible that there may be hundreds of parcels of fine transparent vapour, such as the tails of comets—or if we choose to vary the expression, comets without nuclei—which revolve round the sun within the limits of our system, or revolve round some of the planets, and are generally invisible: we have no reason to doubt that the attraction of the earth would act upon any of these coming within two or three thousand miles of it; that the matter may be combustible; that portions of it may be detached from the rest, drawn towards the earth, and consumed in the atmosphere: nor is it very difficult to conceive, that as diffused aqueous vapour collects into drops of rain, the fine cometary matter may part into thousands of fragments, and fall down in the manner described. The abstraction of a part of their substance in this way would account for the secular decay which comets are supposed to undergo. All this is probable or possible; but we want some grounds for the distinction drawn between these meteors and common shooting stars; and if the one class has the origin assigned, whence are the other? Moreover, the recurrence of the phe-

nomenon is rather too regular. That the earth's periodic time should be so exact a multiple of that of the nebula, is rather against the doctrine of chances; and that so light a body, exposed to disturbance in crossing the orbits of Venus and Mercury, should keep its time so regularly since 1799, is improbable. The radiating centre, too, of a sheet of vapour more than 1000 miles each way, and only 2200 miles high, should not have presented itself as a confined space, of the breadth of three or four moons, in the constellation Leo. These are not reasons for rejecting the hypothesis, but they inculcate the prudence of suspending our entire faith in it, till time shall add to its evidences. In the meanwhile, naturalists will do well to watch for meteoric phenomena for some nights before and after the 12th November.—*Scotsman*.

#### THE FIVE KERNELS OF CORN.

[From Mrs Sigourney's Tales and Essays for Children. Hartford (United States), 1835.]

THOSE who form a new colony, or establish a regular government where there was none before, have need of patience to endure toil, and wisdom to overcome difficulty. The first settlers of New England had many dangers to meet, and hardships to sustain. Their voyage over the ocean was long and tempestuous. They approached the coast during the cold of winter. At their first landing on the rock at Plymouth, December 22, 1620, the whole appearance of the country was dreary and inhospitable. The thick forests looked dark and gloomy, and the tangled underwood and brambles had never been cleared away, to make a comfortable path for their feet. There was no shelter from the cold winds and storms of snow. Some of their number were delicate women and little children, who had been accustomed to comfortable rooms and soft beds. But here was not a single house, or even a board with which to build one. They were forced to cut down logs, and with them, and the branches of trees, to construct rude huts for the refuge of their families. The Indians, who were numerous, lived in simple dwellings called wigwags, and were astonished at the arrival of the white strangers. At first they fled away and viewed them at a distance. Then they became acquainted, and were sometimes friendly, and supplied them with corn. But they grew suspicious, and were disposed to consider them as intruders and enemies—so that wars with the natives were among the troubles of our forefathers. They were an industrious and pious people—patient under hardships, and anxious for the right education of their children. Their sufferings were so great from cold weather and coarse food, and storms from which their habitations were too poor to shelter them, that many of them died.

Among their domestic privations, it was not the least, that for four years no cows were brought to the colony. It is almost impossible for us to realise the inconvenience and suffering which would ensue, if no milk was to be procured, even though our tables should in other respects be well provided. But there the weaned infant pined—and the aliment best adapted to its sustenance could not be obtained. The little shivering child hungered, and wept for the bread and milk which it used freely to eat in its home beyond the sea. The feeble sick woman languished, and there was no means of preparing for her what might tempt the decaying appetite. There was neither milk, nor sugar, nor eggs, nor chickens. Coarse bread, made of pounded corn, was what they depended on for nourishment. But they were patient and thankful. And these circumstances are mentioned, that children may remember what our ancestors endured—and may learn not to complain if their own food is not always according to their fancy.

But there is a greater evil than being obliged to eat coarse food, namely, not being able to obtain food enough to support nature. This is called *famine*. This also came upon the colonists at Plymouth, or the *pilgrim-fathers*, as they are styled in history. In 1621, the year after their settlement, they were exceedingly distressed for provisions. For two or three months they had no bread at all. Their friends across the ocean, three thousand miles distant, knew not of their distress, and could not therefore relieve it. Many of the less vigorous were not able to bear it. The flesh wasted away from their bones, and they died. Children, with dry and parched lips, asked their parents for a little bread, and they had none to give. But they prayed to God, and besought him to have pity upon his people in the wilderness. Vessels arrived from England, bringing them aid, and summer ripening the corn which they had planted, once more supplied them with food.

In 1623, was another distressing famine. Scarcely any corn could be obtained. At one time the quantity distributed was only five kernels to each person. *Only five kernels to each person!* These were parched, and eaten. This should not be forgotten by the descendants of the pilgrim-fathers. The anniversary of their landing at Plymouth is commemorated by public religious exercises. On the 22d December 1820, was its second centennial celebration, that is, the day on which two centuries had elapsed since their arrival. Great pains were taken by pious and eloquent men, to impress the minds of a happy and prosperous people with a sense of what their ancestors had sustained, in their first planting of this land. At the public dinner, when the table was loaded with the rich

vians of a plentiful country, by each plate were placed *five kernels of corn*, as a memorial of the firm endurance of their fathers.

I have sometimes seen young people displeased with plain and wholesome food, when it was plentifully provided. I have even heard little children complain of what their parents or friends thought most proper for them. I have known them wish for what they could not have, and be uneasy because it was denied them. Then I regretted that they should waste so much precious time, and even make themselves unhappy for such trifles, and forget the old maxim, that we should "*eat to live, and not live to eat.*"

My dear children, if any of you are ever tempted to be dainty, and dissatisfied with plain food, think of the *five kernels of corn*, and be thankful.

#### A STEAMER ON THE DANUBE.

THE captain of our steamer was an Englishman, who, being little conversant with nautical science, was equally skilled in the topography of the Danube. Though he had gone up and down several times, he knew no more of the caprices of the sandbanks than he did of the bed of the Yellow Sea. He had a bitter dislike to his office. Why he was permitted to undertake it, I never could understand. To me, I must say, he was communicative and extremely civil; but my fellow voyagers he treated with a degree of superciliousness which was very amusing. It seemed to be his settled opinion that nobody except an Englishman was worthy of breathing the same air with himself. To be sure, we had a motley crowd on board, such perhaps as never met together on the deck of a steamboat before. Behold us in a mirror.

Near the mast, a group of men, all Tyrolese, are engaged in the several offices of talking, listening, smoking, musing, whistling, singing, and gazing at the dense cloud that rushes into the firmament from our black chimney. They are all rather better dressed than my immediate neighbours; one of them, a fine-looking fellow, whom I take to be the captain of the gang, has his hat cocked in a dandyish style, considerably out of the circular shape. His plume of feathers, too, is larger and of a finer quality than the others. This party would make a capital study for a band of brigands, could they but assume a fiercer expression of countenance. As it is, they look too amiable for a *Salvator Rosa*. At the top of the boat, several knots of women, still Tyrolese, are sitting in various directions, executing for each other, alternately, without the slightest consciousness of the external effect of the operation, the agreeable task of disburdening their hair of its multitudinous inhabitants. No wonder that our captain was enraged.

Descending into the cabin, I found a party of Hungarian nobles, men of genteel appearance and manners, seated at a round table, playing cards. They had been thus engaged all the morning. The stakes were not inconsiderable, and seemed to be taken up occasionally by the winners with infinite delight. Near them, sanctioning their amusement by her bland looks and smiles, is an elderly lady, knitting on a bench, and occasionally conversing with an exceedingly elegant figure, somewhat *petite*; whom, upon further acquaintance, I found to be the Countess N—, on her way from Pesth to Peterwardein. She had married, at the age of eighteen, a botheaded nobleman of her own country, who became attached to her suddenly on account of her beauty. He took her to Pesth, entered into all the amusements of the place, gambling included, which is carried on in that capital to a formidable extent. The result was, that after a short experiment of two years, they were obliged to give up their establishment; and the young countess was now returning to her mother, attended by a French *femme de chambre*, the only remaining fragment of her transient splendour, except her harp, which she saved also from the ruins. She was reading a book of common Hungarian ballads, which seemed to afford her amusement. In a corner, two little girls were tittering away most merrily; I could not make out at what. Within the ladies' cabin, I heard some of the laughing voices, which recalled the sense of my "murdered sleep" of the morning. Upon the whole, I was pleased with the appearance of my companions, and flattered myself with the hope of a pleasant voyage; in which I was not disappointed.

In the course of the day, a variety of new characters emerged from the second cabin and other hiding-places, the greater part of whom soon ceased to attract my notice, as they were of that class that seems born for the mere purpose of transforming animal and vegetable substances into human flesh and blood for the ordinary number of years. Among these specimens of creation, however, there was one little man whom I shall not so speedily forget. He was from Moldavia. He had been in the Russian service during the late war with Turkey; but in what capacity, I could never satisfactorily discover. I suspect he was a spy. He spoke German, French, and Italian fluently. He wore a blue frock-coat, which probably had served him during the said war, as it could boast of only a part of one button and two very unequal skirts remaining in any thing like decent condition. The rest of the garment was covered with grease. A pair of old black stuff trousers, patched at the knees in a most unworkmanlike manner, rent and not patched in other parts indescribable, and vilely tattered at the extremities, together with the ghost of a black waistcoat,

a cast-off military cap, and wretched boots, offered an apology for a better suit, which he said he had at home. His shirt was also in the list of absentees. He had lost the half of one of his thumbs, the other was wrapped in a bandage. He had not shaved for three weeks; he certainly could not have washed either his hands or his face for three months, and a comb had probably not passed through his hair for three years. To crown his personal peculiarities, he had a very red nose, on the top of which was perched a pair of spectacles.—*Quin's Steam Voyage down the Danube, 1835.*

#### VERSES TO THE MEMORY OF MR GEORGE MILLER.

AN EARLY DISSEMINATOR OF CHEAP LITERATURE.\*

While some aspire to glory and to fame,  
And seek the loved memorial of a name:  
While some, Miltonic, strike the sacred lyre,  
Or grasp, like Franklin, the electric fire;  
There are, like Howard, or like Wilberforce,  
Who seek distinction at another source:  
Who taste a joy (ah! seldom known to kings!)  
And pant for honour at her hidden springs.  
Such the mild tenor of thy life's career,  
To every virtue and affection dear.

Thy dawning youth, to science first inclined,  
Scanned the pure page with philosophic mind,  
Till thy maturer talents brought to view  
The studies which thine early boyhood knew;  
And soon "the Book of Nature" stood displayed  
In new and vivid colourings portrayed;  
While o'er its page such piety was thrown  
That Hervey might have claimed it for his own.

And, lo! what streams from Misery's tearful eye,  
On Lothian's shores, called forth thy sympathy;  
First brought the rope-fraught mortar to the strand,  
To wait the drowning sailor to the land;  
For years neglected, prosperous in the end,  
Thou lived to welcome Manby as thy friend;  
Who bade the life-boat triumph o'er the wave,  
Like Mercy, bound to succour and to save.

When Europe trembled 'neath the scourge of war,  
And revolution shook the realms afar,  
The nations drunk with blood! at that dread time  
Thy page went forth to tell that war was crime!  
Thou strained thy talents Freedom's boon to win,  
And burst the chains of Africa's dark-brow'd son;  
And, lo! where now, beyond the western deep,  
Slavery expires, and captives cease to weep!

Within thy native district, first to rear  
The "Press," which, in thy hands, was doomed to wear  
A chaster form:—No more, from door to door,  
The lounging pedlar hawked his poisoned lore;  
For now, subservient to one virtuous end,  
Amusement, with instruction, thou didst blend.  
And, lo! where Brougham and Chambers blaze in day,  
Thou "went before, and gently cleared the way;"  
Unmindful of the magic of a name,  
In secret toil'd, and "blush'd to find it fame!"

From honest purpose never known to swerve,  
And ready still 'th' industrious aim to serve;  
Thine was the upright, independent mind,  
To party men and party measures blind.  
Pious, without the bigot's fiery zeal—  
Indulgent, since you knew that man was frail;  
Thy charity was boundless as thy soul,  
Embracing every caste, from pole to pole;  
Chained to an active life by heaven's decree,  
Retirement still was doubly prized by thee;  
To meditate in the green covert's shade,  
To trace creation in the spiky blade,  
To view the vault where stately mansions shine,  
And own the Architect indeed divine!  
Forsaking worldly ways and worldly men,  
Thou sought the shade, and grasp'd thy favourite pen,  
Still panting in thy loved, thy last retreat,  
With nature, and with nature's God to meet.  
In that domestic circle where you moved,  
They knew how well a parent's part you proved.  
There sat the sire—the monitor—the friend—  
Which, in one person, thou didst nicely blend;  
With naught of pedantry—no vain display—  
Thou led to heaven, and charmed us on the way.  
'T methinks the Howard of some future day,  
Benevolent wandering near thy tomb may stray;  
May haply give the tribute of a tear,  
To trickle o'er the dust reposing near;  
And should some stranger leave the busy throng,  
And ask to whom these sculptur'd stones belong,  
Tell him, that he, who, honour'd, rests below,  
Ne'er lost a friend, nor ever made a foe!

J. M.

#### THE BELL OF ST PAUL'S, LONDON.

In London town wags many a tongue,  
And nonsense much is spoken;  
In London many a lie is told,  
And many a promise broken.

But there's a tongue in London town  
That tells no lies at all;  
And oh! that men gave heed unto  
The truths which from it fall.

Solemn and deep, with measured tone,  
It speaks both night and day;  
You hear it both when close at hand  
And many miles away.

\* Mr Miller was a native of Dunbar, where for many years he carried on the business of a bookseller and printer. In 1812 he published a periodical work entitled "The Cheap Magazine," the matter being written and compiled by himself; and this, though not reaching the degree of cheapness which has been since attained, was one of the first attempts to diffuse a pure and useful literature among the less educated portion of the community. He also wrote a work entitled "Popular Philosophy, or the Book of Nature Laid Open." Mr Miller died on the 23d of July 1835.

By day when all the world's agog,  
It speaks though all be talking;  
Speaks though not spoken to, and speaks  
To resting, running, walking.  
By night when sober folks repose,  
The restless only waking,  
It, sleepless, to the sleepless speaks,  
The midnight silence breaking.  
Unheeded though its voice resound  
Through Middlesex and Surrey,  
By Folly in a lazy mood,  
And Folly in a hurry;  
Still it proclaims to both aloud,  
'Mid London's ceaseless humming,  
"Mortals, take heed! Time flies apace!  
Eternity is coming!"  
Saint Paul's! thou hast a solemn voice:  
Oh, may I never fear it;  
But even in life's expiring hour  
May I rejoice to hear it.

S.

A DOZE OF TWO AGES.—"A tedious person," says Ben Jonson, "is one a man would leap a steeple from." Madame de Staël could tolerate nothing that was dry, except her father; but she could neither leap out of her own window, nor walk out of her own room, to escape from Professor Dragg. She looked wistfully round, and saw upon many a countenance an occasional and frequent movement about the lips, indicating that a yawn was at that moment painfully in its birth. Dumont committed no such violence upon nature; he had resigned himself to sleep. The professor went steadily on. Dumont slept audibly. The professor was deaf to every sound but that of his own voice. Madame de Staël was in despair. The professor coming to the end of an eloquent chapter, declaimed with great force and vehemence the emphatic close, and prepared to begin the next. Just in that interstice of time, Dumont stirred and snorted. Madame de Staël seized the opportunity; she clapped her hands and ejaculated *Mon Dieu! Voyez Dumont! Il a dormi pendant deux siècles!* Dumont opened his eyes, and Professor Dragg closed his manuscript.

Mrs SOMERVILLE.—Even in the lowest class of rustic geniuses there is some stimulus of ambition and companionship: boys applaud and encourage one another; a girl usually hides her occupations. Ferguson was nothing to Mrs Somerville. Imagine a pretty young woman, the darling of a family, addicted to the gay life usual to idle people in a large city, liked as well as admired by every one, only children sometimes by her relations for reading too much, and told how unamiable it was to be a blue-stocking—stealing away into her solitary chamber, to pore unaided over the difficulties of geometry and algebra, and commune with the stars. How deep, how generous and beautiful, was the enthusiasm of that young mind!—how clear and ardent the spirit that would "scorn delights, and live laborious days," for no reward, but the pleasure of exercising its strong energies!—how lofty that pure ambition, which was content with victory, and required not applause!—*Thoughts on the Ladies of the Aristocracy.*

ARRANGEMENT OF PORTRAITS IN IRELAND.—At the late meeting of the British Association in Dublin, while an English gentleman was admiring the portraits in the dining-hall of Dublin College, an old woman, who was scrubbing the tables, threw down her brush, and volunteered to act as his *cicerone*. "Him above there's Harry Grattan; God be good to his soul," said she, pointing to the first portrait; "and that next is poor Lord Kilwarden, who was killed by mistake entirely; and there's Hussey Burgh, and a mighty grate speaker he was, by all accounts; and there's Lord Downes, and Lord Avonmore, and Mr Flood. Now, sir, you must know that Mr Flood and Mr Grattan used to be always fighting in the House of Commons; so, when they hung them up here, they put four judges between them to keep the pace."—*Athenaeum.*

LORD MANSFIELD.—A literary friend of this nobleman applied to him for materials for a biographical record, wishing, as he said, to perpetuate the memory of so great a luminary of the British law. His lordship's answer was, "My success in life is not very remarkable; whatever powers nature gave me I was enabled to cultivate; my father was a man of rank and fashion, and early in life I was introduced into the best company, where my circumstances permitted me to support the character of a man of rank and fashion, and to these circumstances I chiefly owe my success in life. But if you wish to write the life of a truly great man, take that of the late Lord Hardwicke. He was indeed a wonderful character. He became Lord Chancellor of England merely by his virtues, abilities, and learning. His father was an obscure attorney, and his grandfather an humble peasant." Such was the noble mind of Lord Mansfield, the victim of factious persecution.

EDINBURGH: Published by William and Robert Chambers, 39, Waterloo Place; and G. & S. Smith, Paternoster Row, London. Agents—John Macleod 20, Argyle Street, Glasgow; George Young, Dublin; and sold by all other booksellers in Great Britain and Ireland, Canada, Nova Scotia, and United States of America.

Complete sets of the work from its commencement, or numbers to complete sets, may at all times be obtained.

Subscribers in town may have the Paper left at their houses every Saturday morning, by giving their addresses at 19, Waterloo Place. Price of a quarter of twelve weeks, 1s. 6d.; of a half-year of twenty-four weeks, 3s.; and of a year of forty-eight weeks, 6s. In every case payable in advance.

Stereotyped by A. Kirkwood, St Andrew Street; and printed at the Steam-press of W. and R. Chambers.